

**PATENT****TRANSPARENT SUBSTRATE COATED WITH A THIN-FILM MULTILAYER  
HAVING REFLECTION PROPERTIES IN THE INFRARED AND/OR IN  
THE SOLAR RADIATION RANGE**

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**ABSTRACT**

The invention relates to a transparent substrate provided with a thin-film multilayer comprising at least one functional metal layer, especially a silver-based layer, having reflection properties in the infrared and/or in the solar radiation range, at least one metal barrier layer in contact with the functional layer and at least one upper dielectric layer, characterized in that at least one barrier layer is based on zirconium and in that the upper dielectric layer comprises at least one ZnO-based layer in contact with the functional layer or with the barrier layer.